

# Storage Resource Manager Project Status Report

Timur Perelmutov

# SRM Project Objectives

- Provision of support and continuous improvements of the dCache srm v1 already in production use by US-CMS, and various other sites participating in building US-CMS Software and computing project including palliatives to support integration of the experiment.
- Development of SRM V2 client and server in order to satisfy the emerging needs of Fermilab and LHC experiments in Grid Enabled Storage, features need to be delivered ahead of, or in tandem with, other SRM implementations.
- Participation in SRM Collaboration to develop SRM v3 standard, which would resolve all the issues and defects in srm V2, help develop a world class specification which will lead to wider acceptance of SRM as standard grid interface to a storage on the Grid.
- Participation in collaboration with DESY and any other organization willing to contribute to the development of dCache and SRM for the mutual benefits of all participating parties.
- Development of OSG Storage Element

# SRM Project Status

- SRM V1 server in dCache is stable and performs well in CMS Service challenges
- Initial SRM V2 implementation including
  - Data movement functionality
  - Directory functions
- Initial deployment of SRM V2 in US-CMS T1 system
- SRM V2 functions partially interoperate with DPM/Castor (CERN) and DRM (LBNL)

# SRM Project Priorities

- Monitoring interface allowing easy problem identification and providing history info allowing to identify bottlenecks and improve administrability
- Full interoperability with LCG tools
- Explicit Space Management design and implementation.
- VO Based authorization
- Achieving agreement of all SRM developers and users on how to best satisfy needs of LHC experiments with SRM V2 interface to GRID Storage
- New Hire

# Effort Estimates

| Budget/Effort Categories  | Budgeted Effort (FTE-years) |
|---|-----------------------------|
| SRM V1 Improvements, Monitoring and Plots   | 0.5 FTE                     |
| SRM v2 Development and Deployment -<br>Space Reservation, Permission Functions,<br>compatibility testing, etc | 1 FTE                       |
| SRM support   | 0.5 FTE                     |
| Collaboration   | 0.3 FTE                     |
| Project management and training   | 0.2 FTE                     |
| Documentation, TWiki  | 0.2 FTE                     |
| Total   | 2.7 FTE                     |

# Available Effort

- Dmitry Litvintsev
  - 50%-75% of the time works on SRM
  - Expected to work less during the summer
- Ted Hesselroth
  - 50-100% Provides CMS T1/T2 SRM/dCache support
  - Remainder of the time develops VO Based authorization solution for dCache/SRM
  - Expected to transfer responsibilities to the new hire
- Timur Perelmutov
  - 100%
- Summer intern
  - Monitoring and plots
- New hire?

# Resources

- <https://srm.fnal.gov/twiki/bin/view/SrmProject/WebHome>